"Pocket Rocket" RS-366 Dial-Up Fiber Optic Modem

Model TC1230

- Async Data Rates up to 56 Kbps

- Supports all 11 Control Signals

- Multimode (850/1300nm) or Single Mode (1300/1550nm)

- 6 Status LEDs

- Distances up to 80Km

- Sturdy Compact Metal Case

- High Temperature Version (optional)

Intended for Video Conferencing applications, the TC1230 Fiber Optic Modem transmits RS-366 dial-up information between Codecs and CSU/DSUs, Hubs and other Network Devices at the Telco demarcation point.

The TC1230 supports asynchronous data rates up to 56Kbps and plugs directly into the RS-366 interface on the Codec and Network Device. It supports all 11 standard RS-366 control signals (typically 5 in, 6 out), including handshaking.

Typical campus network distances are approximately 5 km multimode and 80 km single mode. Distances can vary depending on the size and type of fiber optic cable, number of connections and type of connectivity devices.

The TC1230 works over all popular sizes and types of multimode (850/1300nm) or single mode (1300/1550nm) fiber optic cable. Fiber optic connectors are ST or FC. Electrical connectors are DB25 female.

6 diagnostic LEDs are included for Power, Sync and individual channel status. Power is 12VDC or 115/230VAC with an external power cube. A hardened temperature version (-20°C to 70°C), Model TC1230T, is also available for harsh environments.

TC COMMUNICATIONS
FIBER OPTIC CONNECTIVITY

Applications

The TC1230 is typically used to transmit dial-up information from a remote Codec to a CSU/DSU at the Telco demarcation point over single mode or multimode fiber optic cable. In addition to adding distance flexibility, it provides immunity from EMI/RFI interference, ground loops and lightning strikes.

TC Communications, Inc.
17881 Cartwright Rd. Irvine, CA 92614 U.S.A.
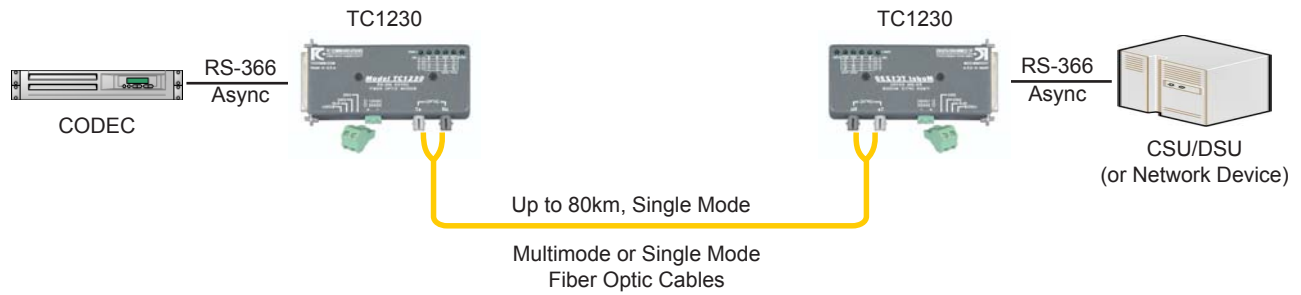Tel: (949) 852-1972, Fax: (949) 852-1948
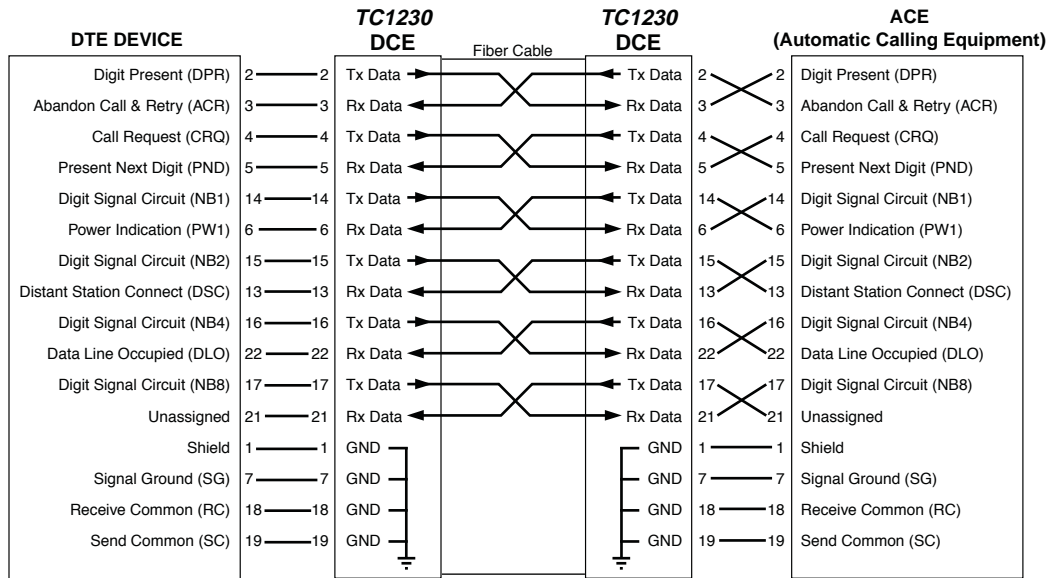Sales: (800) 569-4736
Web Site: www.tccomm.com
E-mail: sales@tccomm.com

Note: The term "Pocket Rocket" refers to the TC Communications family of small, durable and reliable Fiber Optic Modems. Available with a wide variety of interfaces and features, Pocket Rockets combine to provide solutions for most applications encountered in a general purpose fiber optic network.

Typical RS-366 Dial-Up Application Using TC1230s

Virtual & Cable Connections
(connect DTE to ACE devices)

DTE DEVICE			TC1230 DCE	Fiber Cable	TC1230 DCE			ACE (Automatic Calling Equipment)
Digit Present (DPR)	2	2	Tx Data		Tx Data	2	2	Digit Present (DPR)
Abandon Call & Retry (ACR)	3	3	Rx Data		Rx Data	3	3	Abandon Call & Retry (ACR)
Call Request (CRQ)	4	4	Tx Data		Tx Data	4	4	Call Request (CRQ)
Present Next Digit (PND)	5	5	Rx Data		Rx Data	5	5	Present Next Digit (PND)
Digit Signal Circuit (NB1)	14	14	Tx Data		Tx Data	14	14	Digit Signal Circuit (NB1)
Power Indication (PW1)	6	6	Rx Data		Rx Data	6	6	Power Indication (PW1)
Digit Signal Circuit (NB2)	15	15	Tx Data		Tx Data	15	15	Digit Signal Circuit (NB2)
Distant Station Connect (DSC)	13	13	Rx Data		Rx Data	13	13	Distant Station Connect (DSC)
Digit Signal Circuit (NB4)	16	16	Tx Data		Tx Data	16	16	Digit Signal Circuit (NB4)
Data Line Occupied (DLO)	22	22	Rx Data		Rx Data	22	22	Data Line Occupied (DLO)
Digit Signal Circuit (NB8)	17	17	Tx Data		Tx Data	17	17	Digit Signal Circuit (NB8)
Unassigned	21	21	Rx Data		Rx Data	21	21	Unassigned
Shield	1	1	GND		GND	1	1	Shield
Signal Ground (SG)	7	7	GND		GND	7	7	Signal Ground (SG)
Receive Common (RC)	18	18	GND		GND	18	18	Receive Common (RC)
Send Common (SC)	19	19	GND		GND	19	19	Send Common (SC)

Data Rates
Async (per channel).......up to 56 Kbps

Optical
Transmitter..........................LED/ELED
Receiver..............................PIN Diode
Wavelength...............850/1300nm MM
.............................1300/1550nm SM
Fiber Optic Connectors ....ST
....Optional FC
Loss Budget* - 850/1300/1550nm
Multimode @62.5/125µm..........15dB
Single Mode @9/125µm............20dB

Electrical
Connector ....DB25 Female
Interface ....(DCE) RS-366

System
Bit Error Rate ....1 in 10^9 or better

Visual Indicators
LEDs.....................Power, Tx, Rx, Sync

Power
Standard ....12VDC @250mA
Optional...........................115/230VAC
(with external power cube)

Temperature
Operating........................-10ºC to 50ºC
Hi-Temp (optional) ....-20ºC to 70ºC
Storage...........................-40ºC to 90ºC
Humidity ....95% non-condensing

Physical (Wallmount Base)
Height ....(2.24 cm) 0.88"
Width ....(10.06 cm) 3.96"
Depth ....(7.76 cm) 3.06"
Weight.......................(198 gm) 6.98 oz

*Contact factory for higher requirements

Note - Information contained in this data sheet is subject to change without prior notice. 010B